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EUROPEAN PATENT APPLICATION

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- (74) Representative: Kügele, Bernhard et al NOVAPAT INTERNATIONAL SA, 9, Rue du Valais 1202 Genève (CH)
- (54)Recording medium, recording apparatus and reproduction apparatus for selecting reproduction order of only specific digital data
- (57)The recording medium of this invention is recorded with a plurality of digital data and a plurality of reproduction path information defining a reproduction order of the plurality of digital data, wherein the plurality of reproduction path information includes first reproduction path information defining a reproduction order of all of the plurality of digital data recorded on the recording medium and second reproduction path information defining a reproduction order of at least one of the plurality of digital data recorded on the recording medium.



EUROPEAN SEARCH REPORT

Application Number EP 99 11 0695

		ERED TO BE RELEVANT	,	
Category	Citation of document with it of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL6)
X	LTD) 6 August 1997 * abstract * * column 1, line 18 * column 13, line 4 *	- column 6, line 33 * 2 - column 14, line 37 4 - column 23, line 8 °		G11B20/10
X	EP 0 737 980 A (TOK CO) 16 October 1996 * abstract * * column 2, line 10 * column 13, line 1 * column 13, line 5 * column 18, line 3 * column 23, line 1 * column 25, line 4	- column 5, line 22 * 8 - line 34 * 3 - line 59 * - line 20 * 7 - line 26 * 9 - line 58 * - column 36, line 45	1,4,8,10	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
X	EP 0 689 206 Å (SON 27 December 1995 (1 * abstract * * page 3, line 3 - * page 4, line 39 -	995-12-27) page 4, line 6 *	1,4,8,10	G11B
	The present search report has I	peen drawn up for all claims	_	
	Place of search	Date of completion of the sector		Examiner
	THE HAGUE	12 November 1999	9 Bar	el-Faucheux, C
X : parti Y , parti docu A tech O , non-	ATEGORY OF CITED DOCUMENTS icutarly relevant if taken alone cutarly relevant if combined with anotherent of the same category notogical background—written disclosure mediate document	E earlier patent d after the filing d	ple underlying the a locument, but publicate fait in the application for other reasons	nvention shed on, or

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EUROPEAN SEARCH REPORT

Application Number

Sategory	Citation of document with indica of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X A	EP 0 724 264 A (TOKYO CO) 31 July 1996 (1996 * abstract * * column 1, line 31 - * column 12, line 10 - *	5-07-31) column 5, line 31 *	1 4,8,10	
	* column 14, line 46 - * column 16, line 18 - * column 16, line 54 - * column 18, line 59 - *	line 29 * column 17, line 2 * column 19, line 13		
	* column 20, line 3 - * column 22, line 31 - * column 28, line 13 - * figures 1,6,12,14,17	- column 23, line 12 - line 25 *		
X A	US 5 642 346 A (MIMURA 24 June 1997 (1997-06- * abstract * * column 1, line 13 - * column 3, line 43 - * column 5, line 59 - * column 8, line 9 - 1 * column 14, line 36 - * figures 1,15-19,36 *	1ine 21 * line 65 * line 54 * column 6, line 18 * ine 40 * line 52 *	1	TECHNICAL FIELDS SEARCHED (tm.Cl.6)
X A	WO 97 06531 A (SONY CO (JP); FUJINAMI YASUSHI 20 February 1997 (1997 * abstract *	(JP); HAAN WIEBE)	4,8,10	
X A	US 5 721 724 A (MIMURA 24 February 1998 (1998 * the whole document *	3-02-24)	1 4,8,10	
	The present search report has been			Ехатуро
	THE HAGUE	Date of completion of the search 12 November 1999	Bar	el-Faucheux, C
X part Y;part doci A:tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another iment of the same category monitor the same category monitor disclosure	E : earlier patent d after the fiting d D document caed L document caed	n the application for other reasons	shed on, or



EUROPEAN SEARCH REPORT

Application Number EP 99 11 0695

Category	Citation of document with i of relevant pas	ndication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Ct.8)
X	EP 0 685 845 A (TOS SHIBAURA ELECTRIC O 6 December 1995 (19	O (JP))	1	
A	* the whole documer		4,8,10	
Ą	WO 96 38837 A (VOQL ;VOQUETTE NETWORKS 5 December 1996 (19 * the whole documen	INC (US)) 96-12-05)	2,3,5-7,	
•				
				TECHNICAL FIELDS SEARCHED (Int.CI.6)
			·	
	The erosent sparch report has	noon drawn up for all claims		
	The present search report has	Date of completion of the sea		Example/
	THE HAGUE	12 November 1	1	el-Faucheux, C
Ci	THE HAGUE	T theory or p	rinciple underlying the ent document, but public	nvantion
Y : parts	cularly relevent if taken alone cularly relevant if combined with anol ment of the same category	after the fil her D: document		



Application Number

EP 99 11 0695

CLAIMS INCURRING FEES
The present European patent application comprised at the time of filing more than ten claims.
Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



LACK OF UNITY OF INVENTION SHEET B

Application Number

EP 99 11 0695

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claim: 1 4 8 10

Recording medium, recording apparatus, reproduction apparatus and program storage medium: a plurality of path information defining a reproduction order of at least one of the plurality of digital data is recorded on the medium with the plurality of digital data. The reproduction order can be selected by the user via an editor.

2. Claims: 2 3 5-7 9 11

Recording medium, recording apparatus, reproduction apparatus and program storage medium: path information defining a reproduction order of a plurality of digital data is recorded on the medium with one plurality of digital data, and at least one of the plurality of digital data to reproduce according to path information has not been recorded on the recording medium, that is why the reproduction path info includes flag info indicating whether or not each of the plurality of digital data has been recorded on the recording medium. When flag info indicates that digital data has not been recorded on the recording medium, a controller controls obtaining digital data from outside the recording apparatus in accordance with the address info. The reproduction order can be selected by the user via an editor.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way flable for these particulars which are merely given for the purpose of information.

12-11-1999

	Patent documented in search rep		Publication date	1	Patent family member(s)	Publication date
EP	0788094	Α	06-08-1997	CN	1164916 A	12-11-19
=•	 •	- •		EP	0915470 A	12-05-19
	•		•	MO	9707504 A	27-02-19
				JP	11066813 A	09~03-19
				JP	2813245 B	22-10-19
			_	US	5907658 A	25-05-19
EP	0737980	Α	16-10-1996	AT	184727 T	15-10-19
				CA	2173929 A	15-10-19
		*		CN	1150293 A	21-05-199
				DE	69604221 D	21-10-199
				JP	2875231 B	31-03-199
				JP	10050034 A	20-02-199
				JP	8339665 A	24-12-199
EP	0689206	A	27-12-1995	US	5687160 A	11-11-199
				CN	1119896 A	03-04-199
				WO	9516262 A	15-06-199
EP	0724264	Α	31-07-1996	AT	174149 T	15-12-199
				CA	2168327 A	31-07-199
				CN	1134583 A	30-10-199
				DE	69601039 D	14-01-199
			•	DE	696 0 1039 T	24-06-199
				EP	0872839 A	21-10-199
•				JP	2747268 B	06-05-199
				JP	8273304 A	18-10-199
	•			JP	2857126 B	10-02-199
				JP	10074379 A	17-03-199
			•	JP	2875237 B	31-03-199
				JP	10074380 A	17-03-199
	· 			US	5870523 A	09-02-199
US	5642346	Α	24-06-1997	JР	2677775 B	17-11-199
				JP	7334939 A	22-12-199
				บร	5721724 A	24-02-199
				DE	69501679 D	09-04-199
		•		DE	69501679 T	27-08-199
				DE	69501724 D	09-04-199
				DE	69501724 T	27-08-199
			• •	DE	69501726 D	0.9-04-199
• .	• •			DE	69501726 T	27-08-199
				EP	0685845 A	06-12-199
• • •		1		EP	0750304 A	27-12-199
. 12	•			EP	0751524 A	02-01-199
-	•			JP	2882601 B	12-04-199

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-11-1999

US 5642346	A		JP JP	10064246 A 2944570 B	06-03-1998
			JP	2011570 B	
				ルフササン/ひ D	06-09-1999
			JP	10074378 A	17-03-1998
			JP	2665217 B	22-10-1997
			JP	8329615 A	13-12-1996
			JΡ	2877760 B	31-03-1999
_			JP	9017126 A	17-01-1997
			บร	5636200 A	03-06-1997
			US	5831966 A	03-11-1998
WD 9706531		20-02-1997	AU	6630496 A	05-03-1997
7.00001	,,	20 02 100,	BR	9606567 A	30-12-1997
			CA	2200346 A	20-02-1997
			CN	1213832 A	14-04-1999
			EP	0784848 A	23-07-1997
			JP	9106631 A	22-04-1997
US 5721724	A	24-02-1998	JP	2677775 B	17-11-1997
00 0.22.2		2, 00 1000	JP	7334939 A	22-12-1995
			ŭs	5642346 A	24-06-1997
		•	DE	69501679 D	09-04-1998
		·	DE	69501679 T	27-08-1998
			DE	69501724 D	09-04-1998
			DE	69501724 T	27-08-1998
			DE	69501726 D	09-04-1998
			DE	69501726 T	27-08-1998
			EP	0685845 A	06-12-1995
			EP	0750304 A	27-12-1996
				0751524 A	02-01-1995
			EP JP	2882601 B	12-04-1999
					06-03-1998
			JP	10064246 A	06-09-1999
			JP	2944570 B	
			JP.	10074378 A	17-03-1998
			JP	2665217 B	22-10-1997
			JP	8329615 A	13-12-1996
			JP	2877760 B	31-03-1999
			JP	9017126 A	17-01-1997
		• •	US	5636200 A	03-06-1997
			US	5831966 A	03-11-1997
EP 0685845	A	06-12-1995	JР	2677775 B	17-11-1997
			JP	7334939 A	22-12-1995
			DE	69501679 D	09-04-1998
			DE	69501679 T	27-08-1998
			DE	69501724 D	09-04-1998
• •		., €	DE	69501724 T	27-08-1998
r more details about this arm	nev : cae !	Official Journal of the Furr	opean Patent	Office: No. 12/82	to an analysis of the second o
comic docor title Bill		JJan Journal Of the Euro			

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-11-1999

EP 068		A		DE DE EP JP JP JP JP JP JP US US	69501726 D 69501726 T 0750304 A 0751524 A 2882601 B 10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A 5831966 A	09-04-19 27-08-19 27-12-19 02-01-19 12-04-19 06-03-19 17-03-19 13-12-19 31-03-19 17-01-19 03-06-19 03-11-19
				DE EP JP JP JP JP JP JP US US	69501726 T 0750304 A 0751524 A 2882601 B 10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	27-08-19 27-12-19 02-01-19 12-04-19 06-03-19 06-09-19 17-03-19 22-10-19 13-12-19 13-03-19 03-06-19
wo 96:	38837	-		EP UP UP UP UP UP US US	0750304 A 0751524 A 2882601 B 10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	27-12-1 02-01-1 12-04-1 06-03-1 06-09-1 17-03-1 22-10-1 13-12-1 31-03-1 17-01-1 03-06-1
i0 96:	38837			EP JP JP JP JP JP JP JP US US	0751524 A 2882601 B 10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	02-01-19 12-04-19 06-03-19 06-09-19 17-03-19 22-10-19 13-12-19 31-03-19 17-01-19 03-06-19
10 96:	38837	-		JP JP JP JP JP JP JP US US	2882601 B 10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	12-04-19 06-03-19 06-09-19 17-03-19 22-10-19 13-12-19 31-03-19 17-01-19 03-06-19
10 963	38837	-		JP JP JP JP JP JP US US	10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	06-03-1 06-09-1 17-03-1 22-10-1 13-12-1 31-03-1 17-01-1 03-06-1
v0 96:	38837	-		JP JP JP JP JP JP US US	2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	06-09-1 17-03-1 22-10-1 13-12-1 31-03-1 17-01-1 03-06-1
10 96:	38837			JP JP JP JP US US	10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	17-03-1 22-10-1 13-12-1 31-03-1 17-01-1 03-06-1
 	38837			JP JP JP JP US US	2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	22-10-1 13-12-1 31-03-1 17-01-1 03-06-1
io 96:	 38837			JP JP JP US US	8329615 A 2877760 B 9017126 A 5636200 A	13-12-1 31-03-1 17-01-1 03-06-1
WO 96:	 38837			JP JP US US	2877760 B 9017126 A 5636200 A	31-03-1 17-01-1 03-06-1
WO 96:	 38837			JP US US	9017126 A 5636200 A	17-01-1 03-06-1
#0 96:	 38837			US US	5636200 A	03-06-1
vo 96:	 38837			US		
vo 96:	 38837				5831966 A	11 (- ! ! - !
/0 96:	 38837			116		
vo 96:	 38837				5642346 A	24-06-1
vo 96:	38837			US 	5721724 A	24-02-1
	/	A	05-12-1996	AU EP	6977896 A 0871955 A	18-12-1 21-10-1
						•
	•					
			e Official Journal of the Euro			